DOCUMENT RESUME

ED 242 634 SO 015 543

AUTHOR Reichel, Mary
TITLE The Impact of Online Bibliographic Databases on Teaching and Research in Political Science.
PUB DATE Sep 83
NOTE 22p.; Paper presented at the Annual Meeting of the American Political Science Association (Chicago, IL, September 2, 1983).
PUB TYPE Viewpoints (120) -- Speeches/Conference Papers (150)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS College Instruction; *Databases; Higher Education; Information Retrieval; *Online Systems; *Political Science; Search Strategies; *Social Science Research

ABSTRACT

The availability of online bibliographic databases greatly facilitates literature searching in political science. The advantages to searching databases online include combination of concepts, comprehensiveness, multiple database searching, free-text searching, currency, current awareness services, document delivery service, and convenience. Disadvantages include cost, lack of back files, equipment problems, and the inability to browse. Databases of particular interest to political scientists are described. They are organized by the following categories: political science as a discipline; related disciplines; documents; legislative, judicial, and administrative; popular; numeric; and book. To demonstrate some of the major capabilities of online searching--e.g., searching for a combination of concepts--sample computer search strategies are provided. The major concern about teaching and online searching is that students will not learn how to do literature searching nor learn about the major sources in the field. Researchers, both traditionalists and behavioralists, will benefit from the advantages discussed in the first section of the paper. (RM)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED242634

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

X This document has been reproduced as received from the person or organization originating it.

Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY
Mary Reichel

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

The Impact of Online Bibliographic Databases on Teaching and Research in Political Science

Paper to be Presented at the American Political Science Association Annual Meeting, Chicago, Illinois, September 2, 1983

Copyright by the American Political Science Association

SO 015 543

Submitted by Mary Reichel
Assistant Professor and Head,
Reference Department
University Library
Georgia State University
Atlanta, GA 30303

Introduction

Computers have affected libraries enormously. Libraries are in various stages of computerization with automated circulation systems, acquisition systems, online catalogs, and online bibliographic databases. In reference service, to date, the largest impact has been from the bibliographic databases.

This paper deals with the characteristics of online bibliographic databases, with databases in political science, and with sample searches from these databases. The impact of these databases on teaching and research in political science is discussed, and such issues as costs, critical selection of materials, and document delivery are considered.

The focus is on computerized databases which emphasize periodical articles, government documents, conference papers, and other material. These databases are provided to libraries by vendors. The three largest vendors are DIALOG Information Services, Inc. (DIALOG), Bibliographic Retrieval Service (BRS), and System Development Corporation (SDC). The political science databases available online include such standard ones as Public Affairs Information Service (PAIS), United States Political Science Documents (USPSD), and Social Science Citation Index (SSCI). For the most part the online databases are equivalent to the print source with some significant differences.

The capability to search these databases online or interactively has significant advantages over searching by hand.

The advantages include:

COMBINATION OF CONCEPTS: Multiple ideas can be linked via the computer. If the research topic is how Congress stands on arms shipments to Israel, all key terms can be joined using Boolenan operators to search for the most relevant articles.

SPEED: Searching can be accomplished in a much shorter time. For example, it took less than 15 minutes to search PAIS from 1976 to the present on a human rights topic.

COMPREHENSIVENESS: Huge collections of materials can be scanned because of the computer's speed.

MULTIPLE DATABASE SEARCHING: Ability to search different but related files.

FREE-TEXT VOCABULARY: Often, print indexes can only be searched by means of standardized headings which are imposed by the indexers. In the online environment, in most cases, searchers are given the option of using search terms which normally occur in titles of articles and books. This usually means that currently popular topics can be searched with much greater ease.

CURRENCY: The databases are updated regularly and are usually ahead of their print counterparts. Some databases, e.g., Newsearch, exist to provide the most current information possible and are updated daily.

CURRENT AWARENESS SERVICE: A researcher can get monthly printouts of items on his/her topic without having to

search the indexes laboriously.

DOCUMENT DELIVERY SERVICE: Documents can be ordered online. Although this service is expensive, it may be the best solution in terms of obtaining needed documents.

CONVENIENCE: Searching can be done anywhere with a terminal, password, modem, and a phone.*

The disadvantage of searching databases online include:

COST: Databases cost from $25 to $120 per connect hour searching. Libraries usually recover these costs from the individuals. Users may also be charged telecommunications costs. In some cases, libraries may pick up certain percentage of these costs. In any case, these practices vary but the fact is that online searching is more expensive than manual searching. But it is a tradeoff, i.e., the ease of searching and the time saved may compensate for the costs of online searching.

BACK FILES: Most databases only go back to the middle of the 1960's and many are much less retrospective. For example, PAIS only goes back to 1976. However, as time passes, this factor may become less important. Already, for example, Comprehensive Dissertation Index is available from 1861 to the present and the Philosopher's

---

*Ryan E. Hoover. The Library and Information Manager's Guide to Online Services. White Plains, NY: Knowledge Industry Publications, 1980, p.19; and Allen Kent. "The Potential of On-Line Information Systems" in Allen Kent and Thomas J. Galvin. The Online Revolution in Libraries: Proceedings of the 1977 Conference in Pittsburgh, Pennsylvania. New York, NY: Marcel Dekker, 1978, p.22.

Index from 1940 to the present. Further, many researchers are more interested in current literature than in older literature. Again, this factor may be more important than the unavailability of retrospective files.

EQUIPMENT PROBLEMS: Sometimes there are problems with terminals, and often there are telecommunication problems.

SERENDIPITY: Since searchers do not tend to browse online, because of costs, serendipity may often be lost.*

SPECIFIC DATABASES:

There are many bibliographic databases which will be useful to political scientists and their students. This section divides some of these databases into applicable categories. The categories used are Political Science as a Discipline; Related Disciplines; Documents; Legislative, Judicial, and Administrative Databases; Popular Databases; Numeric Databases; and Book Databases. Information on the databases was derived from the catalogs of DIALOG, SDC, and BRS, as well as from Computer-Readable Databases by Martha E. Williams.**

---

*Maureen Pastine and Laura Osegueda. "Computer Databases in Academic Libraries: Implications for Teachers and Scholars of Language and Literature." Paper presented at the Modern Language Association Annual Convention, Los Angeles, December 28, 1982.

**Martha E. Williams, Laurence Lannom, and Carolyn G. Robins. Computer-Readable Databases: A Directory and Data Sourcebook Washington,DC: American Society for Information Science, 1982.

Political Science as a Discipline:

The major databases in this category are familiar ones. They include Public Affairs Information Service International which contains references to the Bulletin from 1976 to the present and also from Foreign Language Index from 1972 to the present. Social SciSearch which is the online name for Social Science Citation Index and United States Political Science Documents are the other two major discipline-related databases.

Related Disciplines:

Databases in closely related fields include America: History and Life and Historical Abstracts. There are a number of databases in criminal justice including the Criminal Justice Periodical Index which has been in machine-readable form since 1975. Psychological Abstracts and Sociological Abstracts are available online, as are a number of management databases.

Documents

Bibliographic control in the area of federal government documents has increased substantially in the last fifteen years. Much of the improvement has been due to the publishing efforts of Congressional Information Service. Of the Congressional Information Service's publications both CIS Index, covering Congressional publications, and American Statistics Index, covering the statistical publications of the federal government, are available online. Access to documents will be even more

enhanced when Congressional Information Service's Statistical Reference Index and Index to International Statistics, which just started publication, become available online. In addition, the Monthly Catalog of United States Government Publications is online with records going back to 1976 and the Government Printing Office has also made the Publications Reference File (PRF) available online. The index to technical reports published by the National Technical Information Service is online and covers literature back to 1964.

Legislative, Judicial, and Administrative Databases

Some of the most interesting and useful databases are for legal resources. LEXIS and WESTLAW offer full-text of court decisions online. There is a database called Federal Register Abstracts which provides access to administrative regulations, and DIALOG plans to bring up a database called Congressional Record Abstracts.

For articles in law journals Legal Resource Index is produced by Information Access Corporation (IAC). The file only goes back to 1980, but it includes citations to law-related articles from IAC's databases for magazine and newspaper articles.

Information on pending legislation and its status is fairly easy to get in print sources at the federal level, but it is nearly impossible to find for various states.* Several machine-readable databases have been produced which do include

*Nancy P. Johnson, Reference Use of State Government Information in Law Libraries. Government Publications Review 10(March-April 1983)208.

information on state bills. Some of these are not typically marketed to libraries. An example is LEGI-SLATE which is available through I.P. Sharp. LEGI-SLATE includes bills for the United States and Texas. Commerce Clearing House has recently made available to libraries, especially to law libraries, its Electronic Legislative Search Service (ELSS). ELSS contains information on federal bills and bills from all fifty states. It includes bill histories, and it is updated frequently. Subject access to this database is available but awkward to use. Not surprisingly, the database is very expensive; it costs $190 per connect hour or over $3.00 per minute.

Another very interesting database which provides information not easily available before is Votes. It contains the "complete record of U.S. Congress roll calls from 96th Congress, First Session to the present, including dates, procedures, titles, subject terms, and totals."*

Popular Databases

These databases provide access to magazines and newspapers and are extremely useful for current events and politics. They serve to supplement PAIS. Three of the most important popular databases are Magazine Index, National Newspaper Index, and Newsearch all produced by Information Access Corporation (IAC). Magazine Index covers 370 magazines while National Newspaper Index covers The Christian Science Monitor, The New York Times,

*Williams, p.1202.

and The Wall Street Journal. Newsearch is the update for Magazine Index, and National Newspaper Index and other IAC databases. It is updated daily so it literally covers yesterday's news. Never before was there subject access to yesterday's stories.

Other popular databases include Newspaper Index which covers ten newspapers such as the San Francisco Chronicle, the Chicago Tribune, and the Denver Post. It also includes an Index to Black Newspapers. The New York Times Information Bank, which is now marketed by Mead Data, and UPI News also fall into this category.

Numeric Databases

Many political scientists are dealing with numeric databases for their research. These databases may be those generally available, such as the census tapes, or ones that the researcher has created on his/her own. Numeric databases are outside the scope of this paper, but libraries are becoming aware of their responsibility to list and house these files. There are many well known archives for the numeric files; the most important for political science is the Inter-University Consortium for Political and Social Research (ICPSR).*

---

*Janet K. Vavra and Erik W. Austin, "Inter-University Consortium for Political and Social Research: A Social Science Data Archive Shaped by User Environments" in Joseph Raben and Gregory Marks, eds. Data Bases in the Humanities and Social Sciences New York: North-Holland Publishing Company, 1980. pp.9-13.

Book Databases

Probably the biggest database in this category is the defacto national cataloging system, OCLC, which is headquartered in Columbus, Ohio. This database includes nine million records for books, monographs, serials, and periodicals. It does not include citations to individual articles in periodicals nor does the system, at this point, allow for subject searching. Access points are by author, title, and corporate entity. OCLC is a tremondous resource for libraries. Besides its use in library technical processing, it is a powerful resource for known item searching and for identifying which libraries own an item. A similar system is Research Libraries Information Network (RLIN) which is operated by the Research Libraries Group located at Stanford University. RLIN, like OCLC, consists of machine-readable catalog records and, unlike OCLC, allows subject searching. RLIN's purpose is to serve research libraries, for example, by including greater number of foreign language material. DIALOG provides access to another type of book database which is Books in Print.

Sample Searches

The purpose of this section is to demonstrate some of the major capabilities of online searching. The first and most important capability is the searcher's ability to search for a

combination of concepts.

For this sample search the topic of human rights and foreign policy was used. The database which seemed most appropriate was PAIS. This topic can be expressed as a combination of two concepts: human rights and foreign policy. When entered into the system, the searcher's query looked like this:

File 49: PAIS International - 76-83

?ss human (w) right? and foreign (w) polic???

Set	Items	Description
1	708	human (w) right?
2	839	foreign (w) polic???
3	40	2 and 3

The computer showed that there were 708 citations where the keyword 'human' and the truncated keyword 'right' (which stands for right or rights or for some other term whose first five letters are right) occur adjacent to each other. Similarly, there were 839 citations in which the keyword 'foreign' and the root word 'polic' occur side by side. Set number 3 shows that there were only 40 citations in which both the combinations of keywords described above occur. These 40 citations, of course, are expected to deal with the twin concepts of human rights and foreign policy. This is an excellent example of the use of Boolean operator AND which limits the output of a search. In contrast, the OR operator which is shown in a later example expands the search.

Before the advent of machine-readable data, libraries could not provide subject or any other kind of access to extremely

current material. The best current indexing lagged two to three months behind. Computers have not done away with all time-lags, but significant improvements have been made. One of the most interesting databases is NewSearch which contains 45 days of material and is updated daily. For current political topics this database provides invaluable information. For example, the phrase 'gender gap' is a phrase which is currently in vogue. One can search the NewSearch database for this subject using the following strategy:

File 211: NewSearch

?s gender (w) gap

Set	Items	Description
1	6	gender (w) gap

The computer found six articles which used the phrase gender gap. I was interested in women's attitudes toward President Reagan and how women are predicted to vote. Most of the citations were relevant including one in the Washington Post on the women's political caucus meeting.* It's date was July 9, 1983, and the search was done on July 18, 1983. One citation, however, exemplifies the problem caused by keyword searching. It was on the great American gender gap for singles.**

When an alternate search strategy was used the results were

---

*Elizabeth Bumiller, "Getting Tough with the Geneder Gap: Candidates, Courtship and Clout at the Women's Political Caucus." Washington Post July 9, 1983, p.C1,col.5.

**Ann Corbett, "Singles: The Great American Gender Gap." Washington Post July 14, 1983, p.F5, col.1.

much better. The search was done using the terms 'Reagan,' 'women,' and 'female.' The online search strategy was:

(Reagan) and (wom?n or female?)

This strategy retrieved 28 citations or "hits."

Searching related databases is one of the major advantages of computer searching. To illustrate this point, a search was conducted on political alienation and attitudes in Psychological Abstracts. Almost 30 relevant items were found, and most of these were not in journals which are indexed in political science sources. For instance, there were articles in the Journal of Social Psychology, the Gerontologist, and Sociology and Social Research. An example of an interesting citation is the following:

65-12564 Vol No: 65 Abstract No: 12564

THE MOTIVATION AND POLITICAL ALIENTATION OF OLDER AMERICANS.

Cox, Harold

Indiana State U, Terre Haute

International Journal of Aging & Human Development 1980 Vol 11(1) 1-12 CODEN: IJADDT ISSN: 00914150

Language: ENGLISH Document Type: JOURNAL ARTICLE

Examined the relationship between the personal motivation (whether internally or externally oriented) and the feeling of political incapability, political discontentment, and anomie among 152 55-102 yr old individuals. ...

.

.

.

Descriptors: ACED, MIDDLE AGED, MOTIVATION, INTERNAL EXTERNAL LOCUS OF CONTROL, POLITICAL ATTITUDES, ANOMIE

Identifiers: internal vs external locus of control, political incapability & discontentment & anomie, 55-102 yr olds

Section Headings: 2840 (PSYCHOLOGICAL & PERSONALITY DEVELOPMENT)

A second example of searching in related databases used the topic of the corporate influence on political action committees. Using PAIS, the following strategy was developed.

File: 49 PAIS International
?ss political (w) action (w) committee? and (business? or corporation? or compan?)

Set	Items	Description
1	57	political (w) action (w) committee
2	10141	business?
3	3952	corporation?
4	3173	compan?
5	27	1 and (2 or 3 or 4)

The 27 citations found in PAIS were relevant. The search strategy was saved, and, without retyping, was input into Sociological Abstracts. The same process could be repeated with business and other relevant databases.

The Impact on Teaching and Research

Machine-readable databases and online searching are in fairly sophisticated stages although there will still be many changes and improvements. It is definitely time for librarians and scholars in other fields to assess the impact of these databases on teaching and research.

Teaching

The major concern about teaching and online searching is that students will not learn how to do literature searching nor about the major sources in the field. As one scholar comments:

> I detect already among many college students a naive trust in the efficacy of the machine and a willingness to use it so as to subvert the educational experience that a term

paper is meant to provide. The traditional manual search yields much valuable knowledge as a byproduct of locating relevant information*

The best approach is not to discourage students from using online searches but to inform and to teach them about literature searching generally and specifically about when online searching is appropriate. Faculty members when they design assignments with library-related components should consider if the students can wisely use the online capabilities. For example, one of the benefits of taking political science courses for students may be that they learn the need for regular reading of newspapers and other news sources.** With databases like NewSearch students can get access to a variety of current news articles on the same subject and analyze and compare the information given and the points of view expressed.

It is very important to continue to give students an overview of the library resources in political science. For political science students this overview can be given by a librarian or a faculty member as part of a research methods course or as individual lectures in various courses. Whatever the method, students need to be aware that they must use the Universal Reference System as well as USPSD online for access to the scholarly literature.

Advocacy of students' use of online searching is mixed with a

---

*Stephen K. Sloan, "Computer Searching: A Primer for the Uninformed Scholar," Academe 68(Nov-Dec 1982):14.

**Daniel F. Detzner, "Developing the News Habit in the Introductory American Government Course," Teaching Political Science 9(Summer 1982):177-184.

real concern about libraries' cost arrangement. Many students will not have $10.00 or $15.00 for online searches, and they should not be excluded because they cannot pay. Perhaps political science departments need to set aside a sum of money to use for student online searching. Libraries can try to find alternate ways to subsidize this service. One alternate way is to cancel subscriptions for paper copies of indexes, but that does not seem to be an acceptable alternative. Librarians and faculty members should work together on some experimental assignments involving online searches and determine how effective and how costly the searches are.

Graduate students, especially doctoral students, present a different case than undergraduates. There is no doubt in my mind that graduate students doing their literature reviews should use online searches in combination with other strategies.

Once students are using the online searches, faculty members need to address the problems which arise when too many citations are retrieved. Students will need to be advised by faculty members and librarians about choosing appropriate topics, neither too broad nor too narrow. In addition, critical selection of sources will be very important. Faculty members may want to advise students only to use scholarly sources or to use scholarly sources for the framework and more popular sources for additional data. These issues are the same ones that are important in any literature search. Perhaps computer access will help students focus on some of these basic principles.

One aspect of online searching will cause as much trouble for

students as faculty. Since more citations are likely to be retrived, individual libraries will have a smaller percentage of the sources cited. Libraries need to continue and to strengthen their cooperative collection development work and interlibrary loan arrangements. Students and faculty also may have to pay for the documents sold by the various vendors.

RESEARCH

Political Scientists seem to be categorized into two groups: the traditionalists and the behavioralists. According to Smalley's fine article on the literature of political science traditionalists will use library resources heavily in traditional political science sources, history material and legal sources.* They will interpret, describe, explain, and make case studies of the library material. The behavioralists will use statistical data heavily. They will use traditional literature less, but they will be interested in material from the other social sciences. They will also use data archives and data they themselves produce. The behavioralists will do their research by testing "hypotheses within a framework of theory [and by focusing] on behavior of individuals."**

The benefits of online searching for scholars doing traditional research seems obvious. Better and quicker access to material will be a real benefit. As with the databases giving

---

*Topsy Smalley, "Political Science: The Discipline, the Literature, and the Library" Libri 30(March 1980) 33-52.

**Smalley, p.49.

information on state bills, more databases will be created to open new areas for traditional research. For the behavioralists, the benefits may not be as obvious, but they are equally significant. These researchers will need to continue to do preliminary literature searching even if their projects center around data they generate. Their need to use material from other disciplines will be greatly facilitated by online searching. In fact, researchers using behavioral methods may use online searching more readily because they will use computers in other areas of their research.

Both types of researchers will benefit from the advantages discussed and demonstrated earlier in this paper. Combination of concepts which allows for more specific searching is most useful as is the ability to do free-text searching. An important service to keep in mind is current awareness updates. When a researcher has constructed a successful search and has found relevant citations, the same search strategy can be run in each update to the database. The updates usually are monthly.

Presently online searching is primarily done by a librarian, generally, in the presence of the questionar. The librarian and the scholar work out the search statement and, consequently, the search strategy together, and the librarian inputs the information. It is not ideal to have this intermediary between the scholar and the database. Database vendors are developing in two areas which eventually will change this situation. First, software has been developed which makes searching easier. It also offers help online, and it interfaces with the search

languages of all three of the major bibliographic vendors. Secondly, at least two of the vendors, DIALOG and BRS, are marketing some of their files directly to microcomputer users. The searching is not as sophisticated as their full systems, but preliminary searching is quite feasible. One can predict that within a relatively short time, perhaps ten years, most scholars will be doing their own online searching.

Conclusion

The availability of online bibliographic databases greatly facilitates literature searching in political science. Researchers can be much more specific in looking for materials on their subjects as well as more comprehensive. The advantages of using online access outweigh the disadvantages, yet researchers need to be aware of limitations. More importantly, political scientists need to plan for the appropriate use of online searching for both themselves and their students.

Acknowledgments

I would like to thank Ms. Carolyn Kirkendall, Program Officer, Association of College and Research Libraries and Director of the LOEX Clearinghouse at Eastern Michigan University, for encouraging me to submit this paper. I would also like to thank Dr. Rao Aluri, Assistant Professor at Emory University's Division of Library and Information Management, for his invaluable help with this paper and Ms. Anne Page Mosby, Reference Librarian and Assistant Professor at Georgia State University, for helping me to execute the paper.